

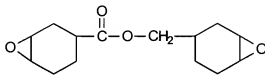
Appl. No. 10/757,685

Amdt. dated December 22, 2004

Reply to Office action of September 28, 2004

Please replace paragraph [0028] with the following paragraph in its entirety. Added language to paragraph [0028] is identified by underlining. No text is deleted by this amendment.

[0028] (Presently Amended) Epoxy acid scavengers are any materials bearing an epoxy functionality. Such materials are described in The Encyclopedia of Polymer Science and Engineering, 2nd Edition, Vol. 6, pages 225-382. Given the number of materials that this discloses, and recognizing that the present invention has only recently been made, it can be appreciated that much needs to be done to identify preferred epoxy-bearing components. At this point it has been shown that a particular alicyclic material having a high epoxy function concentration performs well. (The number of epoxy groups relative to the size of the overall molecule is generally expressed as Epoxy Equivalent Weight (EEW), defined as the weight in grams of material which contains one gram equivalent of epoxide.) The identity of this preferred molecule is shown below:



3',4'-epoxycyclohexylmethyl-3,4-epoxycyclohexanecarboxylate
ERL-4221 as sold by Union Carbide Corporation

Similar molecules include:

3,4-epoxycyclohexyloxirane
2-(3',4'-epoxycyclohexyl)-5,1"-spiro-3",4"-epoxycyclohexane-1,3-dioxane
bis(3,4-epoxy-cyclohexylmethyl)adipate
cyclopentene oxide
7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid
cyclohexene oxide

Besides the alicyclic epoxides, it is suggested that the simple aliphatic epoxies such as

propylene oxide
butylene oxide
hexylene oxide

may also be desirable because of their low EEW and economy.